connection to the first and second circuit elements;

forming metal layers in the vias and elsewhere on a working surface of the substrate;

patterning and etching the metal layers to provide desired interconnection between the first and second circuit elements and other circuit elements or interconnection lines;

coating at least a portion of a surface of a substrate with a mixture of oxide and carbon sources; and

transforming the mixture of oxide and carbon sources into a second porous oxycarbide glass dielectric layer on the integrated circuit.

55.(Amended) [The] A method [of claim 54] , comprising:

providing a plurality of circuit elements on a substrate;

coating at least a portion of a surface of the substrate with a mixture of oxide and carbon sources;

transforming the mixture of oxide and carbon sources into a first porous oxycarbide glass dielectric layer on the integrated circuit and insulating first and second of the plurality of circuit elements from each other, the first porous oxycarbide glass dielectric layer having voids that have an approximate diameter between 20 angstroms and 300 angstroms;

selectively forming vias in the first porous oxycarbide glass dielectric layer for providing connection to the first and second circuit elements;

forming metal layers in the vias and elsewhere on a working surface of the substrate;

patterning and etching the metal layers to provide desired interconnection between the first and second circuit elements and other circuit elements or interconnection lines;

coating at least a portion of a surface of a substrate with a mixture of oxide and carbon sources;

transforming the mixture of oxide and carbon sources into a second porous oxycarbide glass dielectric layer on the integrated circuit; and

wherein the second porous oxycarbide glass dielectric layer has a dielectric constant less than approximately 2.0.

58.(Amended) [The] A method [of claim 54] , comprising:

providing a plurality of circuit elements on a substrate;

coating at least a portion of a surface of the substrate with a mixture of oxide and carbon sources;

transforming the mixture of oxide and carbon sources into a first porous oxycarbide glass dielectric layer on the integrated circuit and insulating first and second of the plurality of circuit elements from each other, the first porous oxycarbide glass dielectric layer having voids that have an approximate diameter between 20 angstroms and 300 angstroms;

selectively forming vias in the first porous oxycarbide glass dielectric layer for providing connection to the first and second circuit elements;

forming metal layers in the vias and elsewhere on a working surface of the substrate;

patterning and etching the metal layers to provide desired interconnection between the first and second circuit elements and other circuit elements or interconnection lines;

coating at least a portion of a surface of a substrate with a mixture of oxide and carbon sources;

transforming the mixture of oxide and carbon sources into a second porous oxycarbide glass dielectric layer on the integrated circuit; and

wherein the first porous oxycarbide glass dielectric layer has a dielectric constant less than approximately 2.0.

59.(Amended) A method, comprising:

forming a plurality of circuit elements on a substrate;

coating at least a portion of a surface of the substrate and at least one of the plurality of circuit elements with a mixture of oxide and carbon sources; and

transforming the mixture of oxide and carbon sources into a silicon oxycarbide having uniformly distributed voids that have an approximate diameter between 20 angstroms and 300 angstroms and a dielectric constant less than approximately 2.0.

64.(Amended) A method, comprising:

forming a plurality of circuit elements on a substrate;

coating at least a portion of a surface of the substrate and at least one of the plurality of circuit elements with a mixture of oxide and carbon sources; and

transforming the mixture of oxide and carbon sources into a silicon oxycarbide having uniformly distributed voids that have an approximate diameter of 30 angstroms and a dielectric constant less than approximately 2.0.

74.(Amended) A method of forming a silicon oxycarbide layer having [uniformly distributed] voids that have an approximate diameter between 20 angstroms and 300 angstroms on a substrate, comprising:

coating at least a portion the substrate with a mixture of oxide and carbon; and

transforming the mixture of oxide and carbon sources into the silicon oxycarbide layer that has a dielectric constant less than approximately 2.0.

79.(Amended) A method, comprising:

coating at least a portion of a surface of the substrate with a mixture of oxide and carbon sources; and

transforming the mixture of oxide and carbon sources into a silicon oxycarbide having uniformly distributed voids that have an approximate diameter of 30 angstroms and having a dielectric constant less than approximately 2.0.

Please add the following new claims:

81. (New) The method of claim 54, wherein the second porous oxycarbide glass dielectric layer has a dielectric constant less than approximately 2.0.